Title: APPARATUS FOR TRANSMITTING AND RECEIVING EXECUTABLE APPLICATIONS AS FOR A MULTIMEDIA SYSTEM, AND METHOD AND SYSTEM TO ORDER AN ITEM USING A DISTRIBUTED COMPUTING SYSTEM

IN THE CLAIMS

Please amend the claims as follows:

1-164. (Cancelled)

165. A method to facilitate placing an order for an item, the method comprising:

at a source of a data stream, providing a series of time division multiplexed packets, ones of which contain auxiliary data that represent a video program, and others of which represent a distributed computing application associated with said video program, and wherein said distributed computing application is repetitively transmitted independent of receiving client computer apparatus during times that said video program is transmitted;

receiving an order request at a client system, the client system comprising a packet selector connected to said source for selecting and directing packets containing said auxiliary data representing said video program to a video signal processor and selecting and directing packets containing said associated distributed computing application to a further processor, said further processor including means to assemble said distributed computing application and execute said distributed computing application to form an interactive video program with an executable code, in which execution of said distributed computing application alters said video program, the executable code causing, at a client system, display of the interactive information associated with the video program is being shown at the client system, the interactive information associated with the video program describing an item to said video program viewer, the receiving of the order request at the client system is via the interactive information displayed at the client system;

automatically determining an item identity for an item to which the order request pertains; and

causing an order to be placed, the order including the item identity.

- 166. The method of claim 165 wherein the order request is received at the client system through detection of an order action by the user utilizing the client system.
- 167. The method of claim 166 wherein the order action is performed during the showing and/or describing of the item via the client system.
- 168. (Withdrawn) The method of 166 wherein the order action includes input of the item identity into the client system.
- 169. (Withdrawn) The method of claim 166 including receiving information, at the client system from the server system, related to the item and wherein the automatic determination of the item identity includes relating the order action to the received information related to the item.
- 170. (Withdrawn) The method of claim 169 wherein the relating includes the detecting of the order action during an offer of the item as specified by any one of a group including a code and a command included within the received information related to the item.
- 171. (Withdrawn) The method of claim 165 wherein the item identity is received within data transmitted from a server system to the client system.
- 172. (Withdrawn) The method of claim 171 wherein the data includes multiplexed first and second streams of packets, the first stream of packets including display information to generate an image on a display of the client system, and the second stream of packets including an computing application.
- 173. (Withdrawn) The method of claim 170 wherein the code is received within data transmitted from a server system to the client system.

- 174. (Withdrawn) The method of claim 166 including prompting the user to perform the order action utilizing the client system.
- 175. (Withdrawn) The method of claim 174 wherein the prompting includes communicating any one of group of prompts including a visual prompt and an audio prompt.
- 176. (Withdrawn) The method of claim 175 wherein the prompt includes any of a group including instructions, options and a menu.
- 177. (Withdrawn) The method of claim 174 wherein the prompting includes generating an audio prompt via an audio reproduction unit of the client system
- 178. (Withdrawn) The method of claim 177 wherein the prompting includes generating an audio prompt via an audio reproduction unit of the client system.
- 179. (Withdrawn) The method of claim 166 wherein the detection of the order action includes detecting an interaction by the user with a control device of the client system.
- 180. (Withdrawn) The method of claim 179 wherein the interaction comprises a single action operation performed by the user.
- 181. (Withdrawn) The method of claim 180 wherein the single action operation comprises a single selection of a button of a remote control device.
- 182. (Withdrawn) The method of claim 165 wherein the retrieved personal information is retrieved from a storage device accessible by the client system and wherein the order is caused to be placed by the client system by a communication with the server system.

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- 183. (Withdrawn) The method of claim 165 including receiving a client application program at the client system from the server system, the client application program to receive the order request and to cause the order to be placed.
- 184. (Withdrawn) The method of claim 183 wherein the client application program is received as part of data including content for display by the client system.
- 185. The method of claim 165 including receiving, at the client system from a server system, an order confirmation.

186-217. (Canceled)

218. A client system including:

an input terminal for receiving a packet data stream including packets of video signal time multiplexed with packets of data representing a distributed computing application which distributed computing application is repetitively transmitted independently of said client computer and at least one of the packets representing the distributed computing application includes a directory containing information inter-relating ones of the packets containing said distributed computing application;

a receiver, coupled to said input terminal, to receive the data stream including information related to an item, providing separate data streams of said video signal and said distributed computing application, extracting said directory packet and responsive to the directory, extracting packets containing said distributed computing application representative data; and

a processing unit, coupled to the data stream receiver, for assembling said distributed computing application and executing the distributed computing application to form an interactive video program with an executable code in which execution of said distributed computing application alters said interactive video program, the executable code causing, at the client system, display of interactive information associated with the video program while the

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interactive video program is being shown at the client system, the interactive information associated with the video program describing an item, the processing unit comprising:

a system bus;

read/write memory, coupled to the system bus;

a data stream input/output adapter, coupled between the data stream receiver and the system bus, for receiving the extracted distributed computing application representative data from the data stream receiver, and storing it in the read/write memory, and having a control output terminal coupled to the selection control input terminal of the data stream selector, for producing the selection control signal; and

a processor, coupled to the system bus, for controlling the data stream input/output device to generate a selection control signal selecting a specified one of the plurality of data streams, and for assembling and executing the distributed computing application stored in the read/write memory.

the processing unit to:

receive an order request at the client system via the interactive information displayed at the client system;

automatically determine an item identity for the item utilizing the information related to the item; and

cause an order to be placed, the order including the item identity.

- 219. The system of claim 218 wherein the processing unit is to receive the order request through detection of an order action by the user.
- 220. The system of claim 219 wherein processing unit is to detect the order action during the showing and/or describing of the item by the client system utilizing the information related to the item.
- 221. (Withdrawn) The system of claim 219 wherein the processing unit is to receive input of the item identity as part of the order action.

- 222. (Withdrawn) The system of claim 219 wherein the processing unit is to relate the order action to the information related to the item.
- 223. (Withdrawn) The system of claim 219 wherein the processing unit to detect the order action during an offer of the item as specified any one of a group including by a code and a command included within the information related to the item.
- 224. (Withdrawn) The system of claim 218 wherein the receiver is to receive the data as multiplexed first and second streams of packets, the first stream of packets including display information to generate an image on a display of the client system, and the second stream of packets including information to be processed by an computing application, the receiver further including a first extractor to extract the first stream of packets from the data and a second extractor to extract the second stream of packets from the data.
- 225. (Withdrawn) The system of claim 219 wherein the processing unit and/or the receiver is to prompt the user to perform the order action utilizing the client system.
- 226. (Withdrawn) The system of claim 225 wherein the processing unit and/or the receiver is to communicate a prompt via the client system.
- 227. (Withdrawn) The system of claim 226 wherein the prompt includes any of a group including an indicia, instructions and a menu.
- 228. (Withdrawn) The system of claim 228 wherein the processing unit and/or the receiver is to generate an audio prompt via an audio reproduction unit of the client system.
- 229. (Withdrawn) The system of claim 228 wherein the audio prompt comprises any one of a group including instructions, options and a menu.

- 230. (Withdrawn) The system of claim 219 wherein the processing unit is to detect the order action by detecting an interaction by the user with a control device of the client system.
- 231. (Withdrawn) The system of claim 230 wherein the interaction comprises a single action operation performed by the user.
- 232. (Withdrawn) The system of claim 231 wherein the single action operation comprises a single selection of a button of a remote control device.
- 233. (Withdrawn) The system of claim 218 including a storage medium from which the retrieved personal information is retrieved and wherein the order is placed by the client system utilizing a communication with a server system.
- 234. (Withdrawn) The system of claim 218 wherein the receiver to receive a client application program from a server system, the client application program being executable by the processing unit to receive the order request and to place the order.
- 235. (Withdrawn) The system of claim 234 wherein the receiver is to receive the client application program as part of the data.
- The system of claim 218 wherein the receiver is to receive an order confirmation.
- 237-246. (Canceled)
- 247. (Withdrawn) The method of claim 172 wherein the second stream of packets includes code modules that comprise the computing application and data modules including data to be processed by the computing application.

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248-249. (Canceled)

250. (Withdrawn) The system of claim 224 wherein the second stream of packets includes at least a portion of the computing application.

251. (Canceled)

252. A machine-readable medium embodying a sequence of instructions that, when executed by a machine, cause the machine to facilitate placing an order for an item by;

at a source of a data stream, providing a series of time division multiplexed packets, ones of which contain auxiliary data that represent a video program, and others of which represent a distributed computing application associated with said video program, and wherein said distributed computing application is repetitively transmitted independent of receiving client computer apparatus during times that said video program is transmitted;

receiving an order request at a client system, the client system comprising a packet selector connected to said source for selecting and directing packets containing said auxiliary data representing said video program to a video signal processor and selecting and directing packets containing said associated distributed computing application to a further processor, said further processor including means to assemble said distributed computing application and execute said distributed computing application to form an interactive video program with an executable code in which execution of said distributed computing application alters said video program, the executable code causing, at a client system, display of interactive information associated with the video program is being showed at the client system, the interactive information associated with the video program describing an item to said video program viewer, the receiving of the order request at the client system being via the interactive information displayed at the client system;

automatically determining an item identity for an item to which the order request pertains; and

causing an order to be placed, the order including the item identity.

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253-255. (Canceled)

- 256. The method of claim 165, wherein the client system is associated with a television receiver.
- 257. The method of claim 165, wherein the client system is associated with a television set-top box.
- 258. The machine-readable medium of claim 252, wherein the client system is associated with a television receiver.
- 259. The machine-readable medium of claim 252, wherein the client system is associated with a television set-top box.

260. An interactive television system, the system including:

an input terminal for receiving a packet data stream including packets of video signal time multiplexed with packets of data representing a distributed computing application which distributed computing application is repetitively transmitted independently of said client computer and at least one of the packets representing the distributed computing application includes a directory containing information inter-relating ones of the packets containing said distributed computing application;

a receiver, coupled to said input terminal, to receive the data stream including information related to an item, providing separate data streams of said video signal and said distributed computing application, extracting said directory packet and responsive to the directory, extracting packets containing said distributed computing application representative data; and

a processing unit, coupled to the data stream receiver, for assembling said distributed computing application and executing the distributed computing application to form an interactive

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video program with an executable code in which execution of said distributed computing application alters said video program, the executable code causing, at a client system, display of interactive information associated with the video program while the video program is being shown at the client system, the interactive information associated with the video program describing an item to said video program viewer, the processing unit comprising:

a system bus;

read/write memory, coupled to the system bus;

a data stream input/output adapter, coupled between the data stream receiver and the system bus, for receiving the extracted distributed computing application representative data from the data stream receiver, and storing it in the read/write memory, and having a control output terminal coupled to the selection control input terminal of the data stream selector, for producing the selection control signal; and

a processor, coupled to the system bus, for controlling the data stream input/output device to generate a selection control signal selecting a specified one of the plurality of data streams, and for assembling and executing the distributed computing application stored in the read/write memory.

the processing unit to:

receive an order request at the client system via the interactive information displayed at the client system;

automatically determine an item identity for the item utilizing the information related to the item; and

cause an order to be placed, the order including the item identity.

261. The interactive television system of claim 260, wherein the receiver and the processing unit reside in a television set-top box.